

REMARKS

Claims 1-68 are pending in the present application. The Office Action mailed October 18, 2006 rejected claims 1, 2, 30 and 32-38 under 35 U.S.C. § 102(c). The Office Action also rejected claims 5-29, 31 and 39-68 under 35 U.S.C. § 103(a). Reconsideration is respectfully requested in view of the above claim amendments and the following remarks.

I. Claims 1, 2, 30, 32-38 Rejected Under 35 U.S.C. § 102(c)

The Office Action rejected claims 1, 2, 30, 32-38 under 35 U.S.C. § 102(c) as being anticipated by Numminen et al. (U.S. Patent No. 6,687,499, hereinafter, “Numminen”). In view of the above amendments to the claims and the following remarks, Applicants respectfully request that this rejection be withdrawn.

“A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” MPEP § 2131 (citing Verdegaal Bros. v. Union Oil Co. of California, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). “The identical invention must be shown in as complete detail as is contained in the ... claim.” Id. (citing Richardson v. Suzuki Motor Co., 9 USPQ2d 1913, 1920 (Fed. Cir. 1989)). In addition, “the reference must be enabling and describe the applicant’s claimed invention sufficiently to have placed it in possession of a person of ordinary skill in the field of the invention.” In re Paulsen, 31 USPQ2d 1671, 1673 (Fed. Cir. 1994).

Independent claim 1 is directed to a “method for testing a plurality of channels associated with a forward link in a wireless data communication system.” Claim 1 recites “receiving test packets via a forward traffic channel.” Claim 1 also recites “transmitting loop back packets via a reverse traffic channel.”

Numminen relates generally to “testing the functioning of a digital radio apparatus on the basis of error statistics.” Numminen, col. 1, lines 10-11. Numminen describes an arrangement in which a mobile station to be tested is connected to test equipment. Figure 3 of Numminen shows a block diagram of a mobile station. The mobile station includes two blocks labeled 332 and 333. These blocks “form a test loop between downlink and uplink transmission.” Id., col. 6, lines 3-4. Numminen describes a case “in which the test equipment wants the mobile station to make comparisons and error statistics in accordance with block 332 between points 305 and

309.” Id., col. 7, lines 37-39. This arrangement is referred to by Numminen as a “G loop.” “While the G loop is active the mobile station ... compiles statistics of the measurement results in a desired manner.” Id., col. 8, lines 29-33. “Complete statistics ... are sent uplink to the test equipment.” Id., col. 8, lines 37-39.

The Office Action asserts that the uplink frames sent by the mobile station in Numminen are “loop back packets” as recited in claim 1. Office Action, page 3. Applicants respectfully disagree. To further clarify the differences between the “loop back packets” recited in claim 1 and the uplink frames sent by the mobile station in Numminen, claim 1 is being amended to recite that the “loop back packets comprise data for determining a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

Numminen does not disclose “transmitting loop back packets” that “comprise data for determining a packet error rate,” as recited in amended claim 1. In Numminen, the statistics compiled by the mobile station include “the bit error ratio or frame erasure ratio.” However, the mobile station in Numminen does not compile statistics “for determining a packet error rate,” as recited in amended claim 1. Numminen does not say anything about determining a “packet error rate.”

Determining a “packet error rate,” as recited in claim 1, is significantly different than determining a “bit error ratio or frame erasure ratio” as described in Numminen. In order to determine a “bit error ratio or frame erasure ratio,” Numminen indicates that the simulation system “produces a pseudorandom bit sequence or other bit sequence which is packed into downlink frames and sent to a mobile station.” Numminen, col. 2, lines 39-41. Numminen also indicates that “a circuit is included in the mobile station which is capable of producing the same test sequence as the simulation system.” Id., col. 2, lines 42-44. Thus, the mobile station “compares the received bit sequence portions to the locally produced portions.” Id., col. 8, lines 29-31. In contrast, in the method of claim 1, it is not necessary to produce a bit sequence at the mobile station that corresponds to the received bit sequence, and it is also not necessary to do a bit comparison as described in Numminen. This is because a “packet error rate” is determined, not the bit error ratio or frame erasure ratio as described in Numminen.

In view of the foregoing, Applicants respectfully submit that claim 1 is patentably distinct from Numminen. Claim 2 depends from claim 1, and is therefore patentably distinct

from Numminen for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claims 1-2 be withdrawn.

Independent claim 30 is directed to a “method for testing one or more channels in a wireless data communication system.” Claim 30 recites “sending a first data transmission via a first channel,” and “receiving a second data transmission via a second channel.” Claim 30 has been amended to recite “determining a packet error rate based on information included in the second data transmission.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

Numminen does not disclose “determining a packet error rate,” as recited in amended claim 30. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 30. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Accordingly, Applicants respectfully submit that claim 30 is patentably distinct from Numminen, and request that the rejection of claim 30 be withdrawn.

Independent claim 32 is directed to a “method for testing the forward link for specific configuration of one or more auxiliary channels in wireless data communication system.” Claim 32 recites “receiving a first message having included therein ... test settings.”

In Numminen, when testing is begun, the test equipment sends the mobile station a paging request 501, and the mobile station responds with a channel request 502. “After that, the test equipment sends an immediate assignment 503 which may include various instructions for the mobile station.” Numminen, col. 6, lines 54-56.

The Office Action asserts that the “various instructions for the mobile station” referred to by Numminen are the “test settings” referred to in claim 32. Office Action, page 5. Applicants respectfully disagree. To further clarify the difference between the “test settings” referred to in claim 32 and the “various instructions for the mobile station” referred to by Numminen, claim 32 has been amended to recite that the first message includes “a plurality of test settings corresponding to a plurality of auxiliary channels.” This amendment is supported by at least paragraph 1040 of Applicants’ specification and original claims 35-38.

Numminen does not disclose “receiving a first message having included therein a plurality of test settings corresponding to a plurality of auxiliary channels,” as recited in amended claim 32. As mentioned, Numminen refers generally to “various instructions for the mobile station.” Numminen, col. 6, lines 55-56. Numminen indicates that the immediate assignment 503 contains “rest octets.” However, Numminen does not describe the “rest octets” in any significant detail, other than to say that some of the values of the rest octets “can be reserved to indicate that in response to the immediate assignment 503 the mobile station to be tested has to set itself in a special test mode.” *Id.*, col. 7, lines 5-8. Numminen certainly does not indicate that the rest octets include “a plurality of test settings corresponding to a plurality of auxiliary channels,” as recited in amended claim 32.

The Office Action refers to a portion of Numminen which states that “a mobile station can operate on data, traffic and control channels.” Numminen, col. 11, lines 4-6. While this may be correct, there is no connection between this statement in Numminen and the immediate assignment message 503 described elsewhere in Numminen. Numminen does not disclose that the immediate assignment message 503 includes “a plurality of test settings corresponding to a plurality of auxiliary channels,” as recited in amended claim 32.

In view of the foregoing, Applicants respectfully submit that claim 32 is patentably distinct from Numminen. Claims 33-38 depend from claim 32, and are therefore patentably distinct from Numminen for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claims 32-38 be withdrawn.

II. Claims 59 and 60 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claims 59 and 60 under 35 U.S.C. § 103(a) as being unpatentable over Numminen in view of Schmutz et al. (U.S. Patent Application Publication No. 2002/0028675, hereinafter “Schmutz”). In view of the above amendments to the claims and the following remarks, Applicants respectfully request that this rejection be withdrawn.

The M.P.E.P. states that

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach

or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure.

The initial burden is on the examiner to provide some suggestion of the desirability of doing what the inventor has done. To support the conclusion that the claimed invention is directed to obvious subject matter, either the references must expressly or impliedly suggest the claimed invention or the examiner must present a convincing line of reasoning as to why the artisan would have found the claimed invention to have been obvious in light of the teachings of the references.

M.P.E.P. § 2142.

Independent claim 59 is directed to a “method for testing a traffic channel in a wireless data communication system.” Claim 59 recites “receiving a plurality of test packets at a plurality of rates on the reverse traffic channel.” To further clarify the differences between claim 59 and the cited references, claim 59 has been amended to recite “determining a packet error rate based on information included in the plurality of test packets.” This amendment is supported by at least paragraphs 1030, 1033, 1071 and 1102 of Applicants’ specification.

Neither Numminen nor Schmutz teaches or suggests “determining a packet error rate,” as recited in amended claim 59. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 59. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Schmutz, which was cited in relation to a different claim element, also does not teach or suggest “determining a packet error rate.” Thus, Applicants respectfully submit that claim 59 is patentably distinct from the cited references. Claim 60 depends from claim 59, and is therefore patentably distinct from the cited references for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claims 59-60 be withdrawn.

III. Claims 6-8 and 10 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claims 6-8 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Numminen in view of Anderson (U.S. Patent Application Publication No. 2005/0003831, hereinafter “Anderson”). In view of the above amendments to the claims and the following remarks, Applicants respectfully request that this rejection be withdrawn.

Independent claim 6 is directed to a “method for testing one or more channels in a wireless data communication system.” Claim 6 recites “receiving a first data transmission via a first channel,” and “identifying parameter values descriptive of the first data transmission.” Claim 6 also recites “forming a second data transmission with the identified parameter values.” Claim 6 has been amended to recite that “the second data transmission comprises data for determining a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

Neither Numminen nor Anderson teaches or suggests “forming a ... data transmission” [that] “comprises data for determining a packet error rate,” as recited in amended claim 6. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 6. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Anderson, which was cited in relation to a different claim element, also does not teach or suggest “forming a ... data transmission” [that] “comprises data for determining a packet error rate.” Thus, Applicants respectfully submit that claim 6 is patentably distinct from the cited references. Claims 7-8 and 10 depend either directly or indirectly from claim 6, and are therefore patentably distinct from the cited references for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claims 6-8 and 10 be withdrawn.

IV. Claim 5 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claim 5 under 35 U.S.C. § 103(a) as being unpatentable over Numminen in view of Funk et al. (U.S. Patent No. 6,766,164, hereinafter “Funk”). In view of the above amendments to the claims and the following remarks, Applicants respectfully request that this rejection be withdrawn.

Independent claim 5 is directed to a “memory communicatively coupled to a digital signal processing device (DSPD).” Claim 5 recites that the digital signal processing device is capable of interpreting digital information to “receive test packets via a forward traffic channel” and to “transmit a plurality of loop back packets via a reverse traffic channel.” Claim 5 has been amended to recite that “the loop back packets comprise data for determining a packet error rate.”

This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants' specification.

Neither Numminen nor Funk teaches or suggests "transmit[ing] a plurality of loop back packets" that "comprise data for determining a packet error rate," as recited in claim 5. As discussed above, in Numminen the mobile station "compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER)." Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen "determin[es] a packet error rate," as recited in amended claim 5. Indeed, Numminen does not say anything at all about "determining a packet error rate." Funk, which was cited in relation to a different claim element, also does not teach or suggest "transmit[ing] a plurality of loop back packets" that "comprise data for determining a packet error rate." Thus, Applicants respectfully submit that claim 5 is patentably distinct from the cited references, and request that the rejection of claim 5 be withdrawn.

V. Claim 9 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claim 9 under 35 U.S.C. § 103(a) as being unpatentable over Numminen and Anderson as applied to claim 6 and further in view of Funk. Claim 9 depends indirectly from independent claim 6. As discussed above, neither Numminen nor Anderson teaches or suggests "forming a ... data transmission" [that] "comprises data for determining a packet error rate," as recited in amended claim 6. Funk, which was cited in relation to a different claim element, also does not teach or suggest "forming a ... data transmission" [that] "comprises data for determining a packet error rate." Thus, Applicants respectfully submit that claim 9 is patentably distinct from the cited references, and request that the rejection of claim 9 be withdrawn.

VI. Claim 24 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claim 24 under 35 U.S.C. § 103(a) as being unpatentable over Numminen and Anderson as applied to claim 6 and further in view of Buchholz et al. (U.S. Patent No. 5,555,266, hereinafter "Buchholz"). Claim 24 depends indirectly from independent claim 6. As discussed above, neither Numminen nor Anderson teaches or suggests "forming a ... data transmission" [that] "comprises data for determining a packet error rate," as recited in

amended claim 6. Buchholz, which was cited in relation to a different claim element, also does not teach or suggest “forming a ... data transmission” [that] “comprises data for determining a packet error rate.” Thus, Applicants respectfully submit that claim 24 is patentably distinct from the cited references, and request that the rejection of claim 24 be withdrawn.

VII. Claim 28 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claim 28 under 35 U.S.C. § 103(a) as being unpatentable over Numminen in view Buchholz and further in view of Anderson. In view of the above amendments to the claims and the following remarks, Applicants respectfully request that this rejection be withdrawn.

Independent claim 28 is directed to a “memory communicatively coupled to a digital signal processing device.” Claim 28 recites that the digital signal processing device is capable of interpreting digital information to “receive a first data transmission via a first channel,” “identify parameter values descriptive of the first data transmission,” and “form a second data transmission with the identified parameter values.” Claim 28 has been amended to recite that “the second data transmission comprises data for determining a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

None of the cited references teach or suggest “forming a ... data transmission” [that] “comprises data for determining a packet error rate,” as recited in amended claim 28. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 28. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Buchholz and Anderson, which were cited in relation to different claim elements, also do not teach or suggest “forming a ... data transmission” [that] “comprises data for determining a packet error rate.” Thus, Applicants respectfully submit that claim 28 is patentably distinct from the cited references. Accordingly, Applicants respectfully request that the rejection of claim 28 be withdrawn.

VIII. Claims 29, 31, 39, 45-48, 50-58, 61-63, 65 and 67-68 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claims 29, 31, 39, 45-48, 50-58, 61-63, 65 and 67-68 under 35 U.S.C. § 103(a) as being unpatentable over Numminen in view of Kobayasi et al. (U.S. Patent No. 6,333,932, hereinafter “Kobayasi”) and Ikeda (U.S. Patent No. 5,636,212, hereinafter “Ikeda”). In view of the above amendments to the claims and the following remarks, Applicants respectfully request that this rejection be withdrawn.

Independent claim 29 is directed to a “method for testing one or more channels in a wireless data communication system.” Claim 29 recites “receiving a plurality of test packets via a forward traffic channel” and “forming a plurality of loop back packets for the plurality of received test packets.” Claim 29 has been amended to recite that “the loop back packets comprise data for determining a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

None of the cited references teach or suggest “forming a plurality of loop back packets” that “comprise data for determining a packet error rate,” as recited in amended claim 29. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 29. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Kobayasi and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “forming a plurality of loop back packets” that “comprise data for determining a packet error rate.” Thus, Applicants respectfully submit that claim 29 is patentably distinct from the cited references. Accordingly, Applicants respectfully request that the rejection of claim 29 be withdrawn.

Independent claim 31 is directed to a “method for testing one or more channels in a wireless data communication system.” Claim 31 recites “sending a plurality of test packets via a forward traffic channel,” and “receiving a plurality of loop back packets via a reverse traffic channel.” Claim 31 has been amended to recite “determining a packet error rate based on information included in the loop back packets.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

None of the cited references teach or suggest “determining a packet error rate,” as recited in amended claim 31. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 31. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Kobayasi and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “determining a packet error rate.” Thus, Applicants respectfully submit that claim 31 is patentably distinct from the cited references, and request that the rejection of claim 31 be withdrawn.

Independent claim 39 is directed to a “memory communicatively coupled to a digital signal processing device (DSPD).” Claim 39 recites that the digital signal processing device is capable of interpreting digital information to “send a plurality of test packets via a forward traffic channel” and to “receive a plurality of loop back packets via a reverse traffic channel.” Claim 39 has been amended to recite that “the loop back packets comprise data for determining a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

None of the cited references teach or suggest “receiv[ing] a plurality of loop back packets” that “comprise data for determining a packet error rate,” as recited in amended claim 39. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 39. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Kobayasi and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “receiv[ing] a plurality of loop back packets” that “comprise data for determining a packet error rate.” Thus, Applicants respectfully submit that claim 39 is patentably distinct from the cited references, and request that the rejection of claim 39 be withdrawn.

Claim 45 is directed to a “method for testing a traffic channel in a wireless data communication system.” Claim 45 recites “forming a plurality of test packets for transmission on the traffic channel,” and “selecting rates for the test packets based on a rate selection scheme.”

The Office Action correctly points out that Numminen does not teach or suggest “selecting rates for the test packets based on a rate selection scheme.” Office Action, page 18. However, the Office Action asserts that this claim element is taught by Kobayasi.

Kobayasi relates generally to “a connectionless communications system for transmitting data at a high speed.” Kobayasi, col. 1, lines 8-9. Kobayasi describes a “subscriber interface shelf,” which is abbreviated as SIFSH. The SIFSH “provides necessary power supplies, common cards, and mounting slots.” *Id.*, col. 54, lines 14-15. The Office Action refers to a portion of Kobayasi which lists “the function of the SIFSH-A,” which appears to be some type of variation of the SIFSH. The cited portion of Kobayasi states “[l]oopback of a test cell in a 156 Mbps cell highway (cell-by-cell/collective selection available).”

The Office Action asserts that the reference to “[l]oopback of a test cell in a 156 Mbps cell highway” in Kobayasi teaches “selecting rates for the test packets based on a rate selection scheme,” as recited in claim 45. Applicants respectfully disagree. To further distinguish claim 45 from what is taught in Kobayasi, claim 45 has been amended to recite that “the selected rates are varied in accordance with a set of rules.” This amendment is supported by at least paragraph 1127 of Applicants’ specification.

Kobayasi does not teach or suggest “a rate selection scheme in which the selected rates are varied in accordance with a set of rules,” as recited in amended claim 45. Kobayasi merely refers to a “156 Mbps cell highway,” without any type of explanation about what this statement means. Kobayasi does not teach or suggest that the “selected rates are varied” at all, as recited in amended claim 45. Kobayasi also does not teach or suggest the variation of rates “in accordance with a set of rules,” as recited in amended claim 45. Ikeda, which was cited in connection with a different claim element, also does not teach or suggest “a rate selection scheme in which the selected rates are varied in accordance with a set of rules.”

In view of the foregoing, Applicants respectfully submit that claim 45 is patentably distinct from the cited references. Claims 46-49 and 50-55 depend either directly or indirectly from claim 45, and are therefore patentably distinct from the cited references for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claims 45-49 and 50-55 be withdrawn.

Independent claim 56 is directed to a “memory communicatively coupled to a digital signal processing device.” Claim 56 recites that the digital signal processing device is capable of

interpreting digital information to “form a plurality of test packets for transmission on the traffic channel,” and “select rates for the test packets based on a rate selection scheme.” Claim 56 has been amended to recite that “the selected rates are varied in accordance with a set of rules.” This amendment is supported by at least paragraph 1127 of Applicants’ specification.

None of the cited references teach or suggest “a rate selection scheme in which the selected rates are varied in accordance with a set of rules,” as recited in amended claim 56. As discussed above, Kobayasi merely refers to a “156 Mbps cell highway,” without any type of explanation about what this statement means. Kobayasi does not teach or suggest that “selected rates are varied,” as recited in amended claim 56. Kobayasi also does not teach or suggest the variation of rates “in accordance with a set of rules,” as recited in amended claim 56. Numminen and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “a rate selection scheme in which the selected rates are varied in accordance with a set of rules,” as recited in amended claim 56. Thus, Applicants respectfully submit that claim 56 is patentably distinct from the cited references, and request that the rejection of claim 56 be withdrawn.

Independent claim 57 is directed to a “method for testing a reverse traffic channel in a wireless data communication system.” Claim 57 recites “forming a plurality of test packets for transmission on the reverse traffic channel” and “selecting rates for the test packets based on a rate selection scheme.” Claim 57 has been amended to recite that “in accordance with the rate selection scheme the selected rates are varied in accordance with a set of rules.” This amendment is supported by at least paragraph 1127 of Applicants’ specification.

None of the cited references teach or suggest “a rate selection scheme” in which “the selected rates are varied in accordance with a set of rules,” as recited in amended claim 57. As discussed above, Kobayasi merely refers to a “156 Mbps cell highway,” without any type of explanation about what this statement means. Kobayasi does not teach or suggest that “selected rates are varied,” as recited in amended claim 57. Kobayasi also does not teach or suggest the variation of rates “in accordance with a set of rules,” as recited in amended claim 57. Numminen and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “a rate selection scheme in which the selected rates are varied in accordance with a set of rules,” as recited in amended claim 57. Thus, Applicants respectfully submit that claim 57 is patentably distinct from the cited references. Claim 58 depends from claim 57, and is therefore patentably

distinct from the cited references for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claims 57-58 be withdrawn.

Independent claim 61 is directed to a “terminal in a wireless data communication system.” Claim 61 recites “a receive data processor operative to receive a plurality of test packets” and a “controller operative to ... form a plurality of loop back packets for the plurality of received test packets.” Claim 61 has been amended to recite that “the loop back packets comprise data for determining a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

None of the cited references teach or suggest “form[ing] a plurality of loop back packets” that “comprise data for determining a packet error rate,” as recited in amended claim 61. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 61. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Kobayasi and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “form[ing] a plurality of loop back packets” that “comprise data for determining a packet error rate.” Thus, Applicants respectfully submit that claim 61 is patentably distinct from the cited references. Claims 62 and 65 depend from claim 61, and are therefore patentably distinct from the cited references for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claims 61-62 and 65 be withdrawn.

Independent claim 63 is directed to an “apparatus in a wireless data communication system.” Claim 63 recites “means for receiving a plurality of test packets via a forward traffic channel,” and “means for forming a plurality of loop back packets for the plurality of received test packets.” Claim 63 has been amended to recite that “the loop back packets comprise data for determining a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

None of the cited references teach or suggest “forming a plurality of loop back packets” that “comprise data for determining a packet error rate,” as recited in amended claim 63. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However,

neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 63. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Kobayasi and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “forming a plurality of loop back packets” that “comprise data for determining a packet error rate.” Thus, Applicants respectfully submit that claim 63 is patentably distinct from the cited references, and request that the rejection of claim 63 be withdrawn.

Independent claim 67 is directed to an “access point in a wireless data communication system.” Claim 67 recites “a transmit data processor operative to process a plurality of test packets for transmission via a forward traffic channel,” and “a receive data processor operative to process a plurality of loop back packets received via a reverse traffic channel.” Claim 67 has been amended to recite that “the loop back packets comprise data for determining a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

None of the cited references teach or suggest “process[ing] a plurality of loop back packets” that “comprise data for determining a packet error rate,” as recited in amended claim 67. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 67. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Kobayasi and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “forming a plurality of loop back packets” that “comprise data for determining a packet error rate.” Thus, Applicants respectfully submit that claim 67 is patentably distinct from the cited references, and request that the rejection of claim 67 be withdrawn.

Independent claim 68 is directed to an “apparatus in a wireless data communication system.” Claim 68 recites “means for processing a plurality of test packets for transmission via a forward traffic channel,” and “means for processing a plurality of loop back packets received via a reverse traffic channel.” Claim 68 has been amended to recite that “the loop back packets comprise data for determining a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

None of the cited references teach or suggest “processing a plurality of loop back packets” that “comprise data for determining a packet error rate,” as recited in amended claim 68. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 68. Indeed, Numminen does not say anything at all about “determining a packet error rate.” Kobayasi and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “forming a plurality of loop back packets” that “comprise data for determining a packet error rate.” Thus, Applicants respectfully submit that claim 68 is patentably distinct from the cited references, and request that the rejection of claim 68 be withdrawn.

IX. Claims 11-13, 15-20, 22, 23 and 25-27 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claims 11-13, 15-20, 22, 23 and 25-27 under 35 U.S.C. § 103(a) as being unpatentable over Numminen and Anderson as applied to claim 6 and further in view of Kobayasi and Ikeda. Claims 11-13, 15-20, 22, 23 and 25-27 depend either directly or indirectly from claim 6. As discussed above, neither Numminen nor Anderson teaches or suggests “forming a ... data transmission” [that] “comprises data for determining a packet error rate,” as recited in amended claim 6. Kobayasi and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “forming a ... data transmission” [that] “comprises data for determining a packet error rate.” Thus, Applicants respectfully submit that claims 11-13, 15-20, 22, 23 and 25-27 are patentably distinct from the cited references, and request that the rejection of these claims be withdrawn.

X. Claims 40-43 and 44 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claims 40-43 and 44 under 35 U.S.C. § 103(a) as being unpatentable over Numminen in view of Oommen et al. (U.S. Patent No. 6,799,203, hereinafter “Oommen”). In view of the above amendments to the claims and the following remarks, Applicants respectfully request that this rejection be withdrawn.

Claim 40 is directed to a “method for testing a link in a wireless data communication system.” Claim 40 recites “collecting a first statistic for a first parameter while in an Idle State”

and “collecting a second statistic for a second parameter while in a Connected State.” Claim 40 has been amended to recite that “at least the first statistic or the second statistic facilitates determination of a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

None of the cited references teach or suggest collecting at least one statistic that “facilitates determination of a packet error rate,” as recited in amended claim 40. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 40. Indeed, Numminen does not say anything at all about “determin[ing] a packet error rate.” Oommen, which was cited in relation to a different claim element, also does not teach or suggest collecting at least one statistic that “facilitates determination of a packet error rate.” Thus, Applicants respectfully submit that claim 40 is patentably distinct from the cited references. Claims 41-43 depend from claim 40, and are therefore patentably distinct from the cited references for at least the same reasons. Accordingly, Applicants respectfully request that the rejection of claims 40-43 be withdrawn.

Claim 44 is directed to a “memory communicatively coupled to a digital signal processing device.” Claim 44 recites that the digital signal processing device is capable of interpreting digital information to “collect a first statistic for a first parameter while in an Idle State” and to “collect a second statistic for a second parameter while in a Connected State.” Claim 44 has been amended to recite that “at least the first statistic or the second statistic facilitates determination of a packet error rate.” This amendment is supported by at least paragraphs 1030, 1033 and 1071 of Applicants’ specification.

None of the cited references teach or suggest collecting at least one statistic that “facilitates determination of a packet error rate,” as recited in amended claim 44. As discussed above, in Numminen the mobile station “compile[s] various error statistics in the form of bit error ratio (BER) or frame error ratio (FER).” Numminen, col. 2, lines 48-50. However, neither the mobile station nor the test equipment in Numminen “determin[es] a packet error rate,” as recited in amended claim 44. Indeed, Numminen does not say anything at all about “determin[ing] a packet error rate.” Oommen, which was cited in relation to a different claim element, also does not teach or suggest collecting at least one statistic that “facilitates

determination of a packet error rate.” Thus, Applicants respectfully submit that claim 44 is patentably distinct from the cited references, and request that the rejection of claim 44 be withdrawn.

XI. Claims 64 and 66 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claims 64 and 66 under 35 U.S.C. § 103(a) as being unpatentable over Numminen, Kobayasi and Ikeda. In view of the above amendments to the claims and the following remarks, Applicants respectfully request that this rejection be withdrawn.

Independent claim 64 is directed to a “terminal in a wireless data communication system.” Claim 64 recites “a controller operative to form a plurality of test packets for transmission on the reverse traffic channel ... and to select rates for the test packets based on a rate selection scheme.” Claim 64 has been amended to recite that “in accordance with the rate selection scheme the selected rates are varied in accordance with a set of rules.” This amendment is supported by at least paragraph 1127 of Applicants’ specification.

None of the cited references teach or suggest “a rate selection scheme in which the selected rates are varied in accordance with a set of rules,” as recited in amended claim 64. As discussed above, Kobayasi merely refers to a “156 Mbps cell highway,” without any type of explanation about what this statement means. Kobayasi does not teach or suggest that “selected rates are varied,” as recited in amended claim 64. Kobayasi also does not teach or suggest the variation of rates “in accordance with a set of rules,” as recited in amended claim 64. Numminen and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “a rate selection scheme in which the selected rates are varied in accordance with a set of rules,” as recited in amended claim 64. Thus, Applicants respectfully submit that claim 64 is patentably distinct from the cited references, and request that the rejection of claim 64 be withdrawn.

Independent claim 66 is directed to an “apparatus in a wireless data communication system.” Claim 66 recites “means for forming a plurality of test packets for transmission on the reverse traffic channel,” and “means for selecting rates for the test packets based on a rate selection scheme.” Claim 66 has been amended to recite that “in accordance with the rate selection scheme the selected rates are varied in accordance with a set of rules.” This amendment is supported by at least paragraph 1127 of Applicants’ specification.

None of the cited references teach or suggest “a rate selection scheme” in which “the selected rates are varied in accordance with a set of rules,” as recited in amended claim 66. As discussed above, Kobayasi merely refers to a “156 Mbps cell highway,” without any type of explanation about what this statement means. Kobayasi does not teach or suggest that “selected rates are varied,” as recited in amended claim 66. Kobayasi also does not teach or suggest the variation of rates “in accordance with a set of rules,” as recited in amended claim 66. Numminen and Ikeda, which were cited in relation to different claim elements, also do not teach or suggest “a rate selection scheme in which the selected rates are varied in accordance with a set of rules,” as recited in amended claim 66. Thus, Applicants respectfully submit that claim 66 is patentably distinct from the cited references, and request that the rejection of claim 66 be withdrawn.

XII. Claims 14 and 21 Rejected Under 35 U.S.C. § 103(a)

The Office Action rejected claims 14 and 21 under 35 U.S.C. § 103(a) as being unpatentable over Numminen and Anderson as applied to claim 6 and further in view of Kobayasi. Claims 14 and 21 depend either directly or indirectly from claim 6. As discussed above, neither Numminen nor Anderson teaches or suggests “forming a ... data transmission” [that] “comprises data for determining a packet error rate,” as recited in amended claim 6. Kobayasi, which was cited in relation to a different claim element, also does not teach or suggest “forming a ... data transmission” [that] “comprises data for determining a packet error rate.” Thus, Applicants respectfully submit that claims 14 and 21 are patentably distinct from the cited references, and request that the rejection of these claims be withdrawn.

REQUEST FOR ALLOWANCE

In view of the foregoing, Applicants submit that all pending claims in the application are patentable. Accordingly, reconsideration and allowance of this application are earnestly solicited. Should any issues remain unresolved, the Examiner is encouraged to telephone the undersigned at the number provided below.

Respectfully submitted,

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